

REMARKS

The application has been amended to place it in condition for allowance at the time of the next Official Action.

Claims status

Claims 17-21, 23-25 and 27-33 are pending in this application.

Claim objection

Amending claim 33 to remove the recited overlap areas is believed to obviate the claim objection noted in the Official Action.

35 USC 112, second paragraph rejection

Claims 17 and 33 have been amended to remove the recited overlap areas noted in the Official Action to address the 35 USC 112, second paragraph rejection and withdrawal of the same is respectfully requested.

35 USC 103 rejection

Claims 17, 19, 23 and 26-30 are rejected under 35 USC 103(a) as being unpatentable over LOFFLER et al. 5,743,420 in view of EMERY 3,664,536. That rejection is respectfully traversed.

Claims 17 and 33 are amended to clarify the relationship of the seal and the circular tab with respect to the peripheral edge of the seal and the flexible radial end of the circular tab.

By way of example, Figures 2a and 2b of the present application, reproduced below, show that the flexible radial end 320 (see Figure 1b) of the circular tab 32 and the peripheral edge 41 of the seal 4 simultaneously bend from positions that are substantially parallel to each other (Figure 2a). The circular tab 32 applies a radial compression (see explanatory Figure below) on the peripheral edge 41, so as to apply the peripheral edge 41 in contact with the neck 5, forming an overlap area inclined at more than  $45^{\circ}$  from the horizontal between the peripheral edge 41 and said circular tab 32, thus sealing the cap screwed to the neck 5 (Figure 2b).

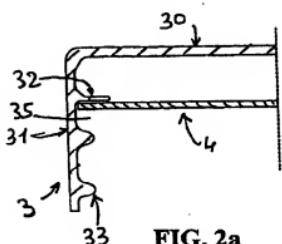


FIG. 2a

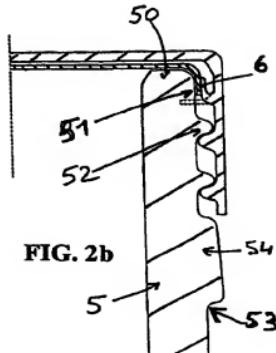
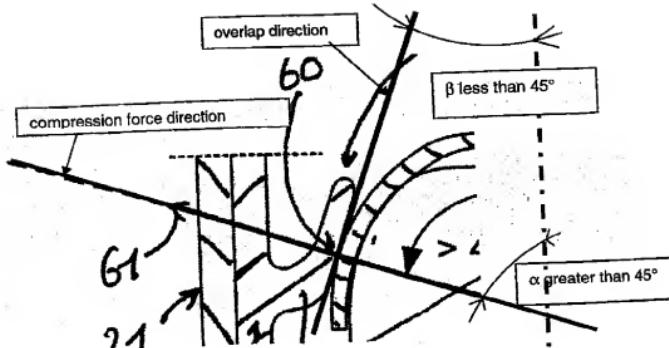


FIG. 2b

Explanatory Figure



By contrast, LOFFLER discloses with respect to the offered Figures 6-8, that the peripheral edge 59 of sealing disk (53), is pressed by rigid sealing lip (9) so as to slide past the lip (9). Thus, the edge (59) does not bend simultaneously with the lip and rather maintains its shape while the lip (9) bends. Moreover, lip (9) is oriented perpendicularly to the sealing disk, not substantially parallel as required. Further, lip 9 does not apply a radial compression on the peripheral edge 59. Rather, region 55 slides past rigid lip 9 until edge 59 and lip 9 come into axial engagement (compression) - see Figure 8.

There is a technical effect associated with the additional feature disclosed by the invention (simultaneous

bending of the flexible radial end of the circular tab and the peripheral edge of the seal): during screwing, since their contact surface moves continuously while the flexible radial end of circular tab (32) and the peripheral edge of the seal (4) are bending, the latter are continuously in tight contact each other at the overlap region. With such a feature, the cap according to the invention is able to give a regular tight contact between the seal and the neck mouth and a regular screwing/unscrewing torque in a large amplitude range of the screwing. This is a much more efficient solution than the cap of LOFFLER'420 when the bottles to be capped are manufactured with a length varying inside industrial tolerances (see the 2nd and the 3rd objectives of the present invention, i.e. paragraphs [0010] and [0011] of the present US patent application US2007/0095782; see also [0014] and [0015]).

EMERY does not overcome the shortcomings of LOFFLER set forth above. Accordingly, the proposed combination of references does not meet claim 17 and the claims that depend there from.

Independent claim 33 is amended along the lines of claim 17 and the analysis above regarding claim 17 also applies to claim 33.

Claims 18 and 32 were rejected under 35 USC 103(a) as being unpatentable over LOFFLER in view of EMERY and further in view of STULL 4,651,886. That rejection is respectfully traversed.

STULL does not overcome the shortcomings of LOFFLER and EMERY set forth above with respect to claim 17. Since claims 18 and 32 depend from claim 17 and further define the invention, these claims are believed to be patentable at least for depending from an allowable independent claim.

Claim 20 was rejected under 35 USC 103(a) as being unpatentable over LOFFLER in view of EMERY and further in view of MORTON 5,259,522. That rejection is respectfully traversed.

MORTON does not overcome the shortcomings of LOFFLER and EMERY set forth above with respect to claim 17. Since claim 20 depends from claim 17 and further defines the invention, this claim is believed to be patentable at least for depending from an allowable independent claim.

Claims 21, 24 and 25 were rejected under 35 USC 103(a) as being unpatentable over LOFFLER in view of EMERY and further in view of DAUTREPPE et al. WO00/30948. That rejection is respectfully traversed.

DAUTREPPE does not overcome the shortcomings of LOFFLER and EMMERY set forth above with respect to claim 17. Since claims 21, 24 and 25 depend from claim 17 and further define the invention, these claims are believed to be patentable at least for depending from an allowable independent claim.

Claim 31 was rejected under 35 USC 103(a) as being unpatentable over LOFFLER in view of EMERY and further in view of CHRISTMAS 5,971,179. That rejection is respectfully traversed.

CHRISTMAS does not overcome the shortcomings of LOFFLER and EMERY set forth above with respect to claim 17. Since claim 31 depends from claim 17 and further defines the invention, this claim is believed to be patentable at least for depending from an allowable independent claim.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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